

Functional Annex B: **EVACUATION**

MISSION

To provide supplemental guidance and assistance to state agencies and to coastal localities concerning hurricane preparedness and response with an emphasis on the evacuation of residents from potential storm inundation areas in the Hampton Roads region.

CONCEPT OF OPERATIONS

This plan addresses the procedures for coordinating an orderly evacuation should a hurricane threaten coastal Virginia. It does not replace or supersede any local plans nor does it usurp the authority of local governments.

A. The VEOC will be fully operational in the event of an approaching hurricane. It will:

1. Advise localities, as they are implementing their hurricane plans, concerning evacuation and other protective actions (see Annex A). The VEOC will maintain a storm assessment capability, based on HURREVAC and the “decision arc” methodology presented in the Virginia Hurricane Evacuation Study and will be prepared to assist coastal localities in making an evacuation decision based on their mutual assessment of the storm. The National Weather Service (NWS) will detect a major hurricane in time for protective actions to be taken, to include the evacuation of residents from potential inundation areas if necessary.
2. The specific path of an approaching hurricane cannot be predicted with certainty. The evacuation of urbanized coastal areas must be initiated well in advance--in some cases as much as 27 hours in advance, in order to be completed before the arrival of tropical storm conditions. Thus, the Governor and local officials have an inherent dilemma: to implement a “sunny day” evacuation in time for evacuees to travel to a safe area or to wait, knowing that a delayed evacuation may result in a serious threat to public safety. Obviously, each storm situation must be evaluated carefully. Close consultation with the NWS, the VEOC, and the EOCs of adjacent and nearby localities will be required.
3. The VEOC and participating state agencies should prepare action checklists to facilitate emergency operations. Local hurricane response plans should also include detailed action checklists for each function as needed. These checklists will serve as a guide for actions to be taken as a storm approaches.
4. Coordinate with host localities to facilitate the reception and care of evacuees traveling inland and seeking safe destinations in public shelters as needed (see Annex D).

5. The VDOT Emergency Operations Center (TEOC) in Richmond and the VDOT Smart Traffic Center in Virginia Beach will be fully operational and will work directly with the Virginia State Police and local law enforcement officials to facilitate evacuation and traffic control (see Annexes B and C).
6. If a large-scale evacuation is required, the VDOT Hampton Roads Hurricane Evacuation Traffic Control Plan will be implemented and monitored at the Smart Traffic Center in Virginia Beach (see Annex C). This plan provides for a Phased Evacuation that further provides for a Lane Reversal Phase (Contra Flow) as may be authorized by the Governor. Its operation may include liaison personnel from VDEM and other state/local agencies, as required. Its primary task will be to facilitate traffic movement in the event of a large-scale evacuation from Hampton Roads. The VEOC will maintain close and direct coordination with local EOCs. The VDOT Hampton Roads Hurricane Evacuation Traffic Control Plan identifies evacuation routes and limits access, based on the maximum capacity of each route. Evacuation routes will be monitored by the Virginia State Police and closed at appropriate points as the approaching hurricane causes high winds and/or rising water. Local governments will be responsible for traffic control within their jurisdictions, to include (if necessary) clearing the roads just before the arrival of tropical storm force winds.

The key persons who should evacuate are those that:

- Live in potential storm inundation areas
- Live in mobile homes
- Medically fragile – require water and or electricity to sustain life

Others should shelter in-place and be prepared to ride out the storm and be self-sufficient for several days without outside sources of electric power or water. An active hurricane awareness program is needed. Persons who are well informed about the hurricane hazard will be better prepared to take the appropriate protective actions (see Annex E).

- C. The organization and assignment of primary and secondary emergency response duties and responsibilities are listed in the State EOP, Volume 1: Basic Plan. Listed below is an appropriately coordinated extension of these task assignments as related to the hurricane hazard.
 1. Governor
 - a. Declare a State of Emergency.
 - b. Order a mandatory evacuation of hurricane risk areas. This authority may be delegated to other state officials or to local officials.

- c. Direct the use of state personnel and resources as needed to assist local governments with emergency operations in the event of a major hurricane.
 - d. Authorize a reimbursement to host localities to cover the costs of opening public shelters to receive and care for hurricane evacuees.
 - e. Request the assistance of the federal government as needed.
- 2. State Coordinator of Emergency Management, Department of Emergency Management (VDEM).
 - a. Operate the VEOC and provide for a coordinated state-level response, on behalf of the Governor, to assist localities with hurricane response and recovery operations.
 - b. Serve as the Governor's executive agent in authorizing needed actions and expenditures.
 - c. Coordinate with federal government agencies, including the Department of Homeland Security\Federal Emergency Management Agency (DHS\FEMA) and the National Weather Center/National Hurricane Center.
 - d. Keep the Governor and other key state government officials informed about the status of emergency response and recovery operations.
 - e. Advise the Governor as to the recommended level of evacuation as appropriate for the threat.
- 3. Department of Transportation (VDOT)
 - a. Develop and maintain the Hampton Roads Hurricane Evacuation Traffic Control Plan (see Annex C).
 - b. Implement the Traffic Control Plan to manage the controlled evacuation of potential inundation areas threatened by a hurricane.
 - c. Operate the Smart Traffic Center in Virginia Beach and the TEOC in Richmond. Keep the VEOC and local EOCs advised of the traffic situation.
 - d. Coordinate the closure of high-risk roadways such as bridges, tunnels, or flood-prone sections of roadway as indicated in the Transportation Emergency Operations Plan (State EOP, Volume 7), the Chesapeake Bay Bridge-Tunnel Closure Plan although not designated as an evacuation route, and other protocols for adjusting transportation resources to meet impending emergencies.

- e. Coordinate the clearing of traffic from major evacuation routes prior to the arrival of sustained tropical storm force winds.
4. Virginia State Police (VSP)
- a. Assist with the implementation of the VDOT Hampton Roads Hurricane Evacuation Traffic Control Plan.
 - b. Expedite the flow of traffic out of the coastal areas during an evacuation.
 - c. Control access to evacuation routes during the evacuation.
 - d. Maintain order and security on designated evacuation routes.
 - e. Monitor the flow of traffic during the evacuation and keep the State EOC informed of the status.
 - f. Following the hurricane, and until essential services have been restored, coordinate with local law enforcement officials to control reentry and to provide for security in the devastated areas.
5. Department of Social Services (DSS) and the American Red Cross (ARC)
- a. Coordinate the opening of public shelters in coastal localities in accordance with local EOPs.
 - b. Coordinate the opening of public shelters in host areas in advance of an evacuation directive, in accordance with local EOPs.
 - c. Provide status reports on the number of public shelters open, the location of open public shelters, the number of public shelter spaces occupied, and the number of public shelter spaces available.
 - d. Provide status reports on the requests and provision of resources for public sheltering operations.
 - e. Provide guidance and assistance with the establishment of congregate care centers and temporary housing facilities for people who cannot return to their homes in the devastated area.
6. Department of Health (VDH)
- a. Coordinate state resources to assist localities with the evacuation and care of people with special health or medical needs. Health care facilities should prepare

to be self-sufficient. If located in a storm inundation area, they should evacuate to a like-facility. If not, they should be prepared to be self-sufficient for several days without water or electric power.

- b. Coordinate state resources to assist localities in providing water, food, and sanitary conditions in public shelters.
- D. The primary strategy for dealing with a major hurricane is to evacuate low-lying areas, which will be inundated by the anticipated storm surge. Due to hurricane force winds, residents of mobile homes are also considered at high risk and should evacuate their mobile home and seek shelter in safer buildings. Other residents should assess the potential impacts to their home and be advised to shelter in-place and be prepared to be self-sufficient for several days.
- E. A major hurricane is defined as a hurricane in Category 3, 4 or 5 on the Saffir-Simpson Scale of hurricane strength. (A Category 5 storm is possible but not likely in latitudes as far north as Virginia.) Potential storm inundation areas should be evacuated. The winds and storm surge in Category 1 and 2 hurricanes are considered less destructive and would not require wide-scale evacuation (see Appendix 2). Hurricane Fran, for example, was a marginal Category 3 storm as it made landfall on September 5, 1996, near Cape Fear, North Carolina. With sustained winds of 115 mph and a maximum storm surge of 15.4 feet above mean sea level, it destroyed more than 100 beachfront homes.
- F. The Commonwealth of Virginia lies in an area vulnerable to hurricanes, although there has not been a severe hurricane to come ashore directly in Virginia for almost 50 years. On average, two Atlantic hurricanes a year come close enough to the Virginia coast to affect detailed monitoring and preparedness activities. The memories and impacts of Hurricane Gloria passing just off the coast in 1985, Hurricane Hugo devastating the Carolinas in 1989, Hurricane Bob skimming the coast in 1991, Hurricane Andrew striking Florida in 1992, Hurricane Bonnie in 1997, and most recently Hurricane Floyd in 1999 and Hurricane Isabel in 2003 have reminded us of our vulnerability. The Virginia coast is a vulnerable target to the direct impact of a major hurricane.

EVACUATION CONSIDERATION GUIDELINES

- A. A decision to implement voluntary or mandatory evacuation in hurricane vulnerable coastal localities requires interaction and coordination between local, state, federal, and certain private sector entities. The primary goal of any evacuation is the preservation of life and, to the degree possible, protection of property. Local and state elected officials and governmental executive leadership must carefully balance the potential risks associated with both the decision to evacuate and the method for evacuating against the risk derived from these and other key factors.

B. There are several key indices that ultimately support the evacuation decision process. These are not exclusive and must be individually and collectively analyzed within a wide range of variables related to each specific hurricane event. There exists no single answer to the evacuation based upon an "empirical" scoring of these factors. Each event differs and must be evaluated on its own merits and characteristics.

C. Indicators Requiring Evaluation:

1. National Weather Service forecasts including the degree of agreement/ non-agreement between various models and forecasts.
2. Life/Safety threat posed by either a "go/no-go" decision.
3. HURREVAC and SLOSH modeling including indicators concerning optimal decision timing in light of such factors as available daylight hours, occupancy, road capacity, expected public behavior, and projected flood and wind impacts.
4. Activities of neighboring states/communities, including potential impacts (direct/indirect) on Virginia's road networks.

D. Evacuation Initiators:

There exist three primary initiators for an evacuation:

1. Spontaneous.
2. Local initiated.
3. State initiated.

E. Implementation Process:

1. The decision to evacuate and the decision to implement traffic management procedures are interrelated but not wholly interdependent. In the event of a decision by a neighboring state to evacuate, primarily North Carolina, it may be necessary to implement traffic management strategies due to the impact on Virginia road networks. These strategies may also be implemented in anticipation of a decision to implement voluntary or mandatory evacuation.
2. The decision to order mandatory evacuation rest with the Governor.
3. The ultimate determination of specific locations and timing of evacuations will be accomplished at the local level.

4. A decision to evacuate large numbers of people from vulnerable areas will stress the limited capabilities of roadways available for this purpose, potentially requiring substantial additional time for completion of an evacuation. Consequently evacuation decisions must be initiated as soon as feasible upon recognition of the threat and must continue to function efficiently until completed or terminated.
5. VDEM, in coordination with applicable state agencies (VDOT & VSP) and affected local governments, will assess the need for executing traffic management strategies. VDEM will be responsible for directing the actual implementation of these strategies by state agencies. **It is probable that strategies may be implemented ahead of actual evacuation decisions by the localities depending on external influences.**
6. Some incidences, involving large populations and limited evacuation timing and road network capacities, may necessitate termination of an evacuation prior to its full completion and evacuees still at risk would be directed to “refuges of last resort” as quickly as possible along the evacuation corridor.

TECHNICAL DATA REPORT

- A. In April 1992, the U. S. Army Corps of Engineers (USACE) published the Technical Data Report (TDR) for the Virginia Hurricane Evacuation Study. Although a Virginia Hurricane Evacuation **Re-Study** is underway, the 1992 data remains the “data of record” until new data becomes available.) The TDR provides the following information for each coastal locality to serve as a basis for hurricane planning. Data has been updated where possible using the 2000 Census Data.
 1. Large-scale maps that define areas to be evacuated from storm surge inundation.
 2. Clearance time--the time required for evacuees traveling out of the region to clear the study area.
 3. Standard “decision arc” methodology for analyzing any given storm and determining when to evacuate.
 4. An inventory of public shelter facilities in coastal localities.
- B. The risk areas includes the city of Virginia Beach and the Eastern Shore on the Atlantic Ocean, the Hampton Roads port area, the southern half of the Chesapeake Bay and the tidal peninsulas formed by the James, York, Rappahannock, and Potomac Rivers. The continental shelf and the shallow bay, with its tidal rivers, create a situation conducive to high storm surges. Tidal surge associated with a major hurricane could cause a maximum inundation of almost 23 feet above sea level on the eastern or ocean side of the Eastern Shore and 18+ feet in the port area of Hampton Roads, in addition to the accumulated effects of tide, waves and rainfall.

- C. More than 1,500,000 persons live in the Hampton Roads region. The total number (in potential storm inundation areas and mobile homes) who may be advised to evacuate their immediate residence and seek safer locations due to an approaching hurricane ranges from approximately 200,000 (13 %) to 600,000 (40%) depending upon the severity of the storm. In addition, tourist occupancy during the peak summer season, primarily in Virginia Beach and Norfolk may exceed an additional 100,000. Persons without personal transportation within the region is estimated to be at 100,000 and plans are currently under development within each locality to address their evacuation.
- D. The Hampton Roads region (including the cities of Virginia Beach, Norfolk, Portsmouth, Newport News, and Hampton) is especially vulnerable to a fast approaching, Hugo-like hurricane because of its relatively dense population and its limited routes of egress. Outbound traffic is likely to be backed up and move very slowly. For example, the U. S. Army Corps of Engineers Evacuation Study estimates that the clearance time for Virginia Beach evacuees during the tourist season would be approximately 27 hours (see Appendix 4) in a worst case scenario.
 - 1. Local officials must be prepared to make a timely decision to evacuate, allowing sufficient time for evacuees to clear the area and travel away from the coast before the arrival of tropical storm force winds.
 - 2. In the heavily populated cities of Hampton Roads there are three distinct evacuation populations:
 - a. Those who seek public shelter in their city, including some of those without personal transportation.
 - b. Those who seek shelter in local hotels or private homes.
 - c. Those who leave the city to seek shelter in homes or hotels in inland localities. Evacuees in the last group may end up staying in public shelters in host localities including some of those without personal transportation mentioned above.

These groups present different problems for local and state emergency planners.

- E. The local government should provide shelter, feeding, medical care, counseling, and security for the evacuees who seek shelter in their city in public shelters. The government should develop a comprehensive shelter plan that provides adequate space, resources, and staff for the maximum number of evacuees for at least 72 hours. The USACE report indicated the shelter space was generally adequate in the coastal areas for the demand. However, since most shelters are operated under American Red Cross (ARC) Guidelines and the ARC has since amended those guidelines some shelters that were previously used are no longer

approved or supported by ARC. This has resulted in a shelter deficiency within the Hampton Roads area.

- F. Local government should plan to rely on its own resources for the days immediately following the storm. Disaster relief resources from throughout the country will generally begin to arrive in the devastated area by the third day after landfall. Therefore, local planning efforts should concentrate on preparing checklists, surveying shelters, develop plans for relocating those without transportation, designating and training staff, identifying mitigation and recovery resources, pre-scripting public services announcements, and other activities that will prepare the government and the population to “ride out” the storm and its immediate aftermath.
- G. The second group of evacuees relocates to the homes of friends or in hotels within their locality. After the storm, however, they may need extended shelter if their homes are damaged or utilities are disrupted.
- H. The third group of evacuees (residents and vacationers that leave the coastal area, including some of those that may not have transportation which the locality has relocated to yet to be determined locations) present different challenges. The foremost issue is transportation. The USACE study estimates the number of vehicles that will be on the roads during an evacuation phase and attempts to determine a “clearance time” for each locality. The clearance time is the time it takes to clear a city or county's roadways of all evacuating traffic and is reflected in Decision Arc methodology (see Annex A, Attachment 2).
- I. What becomes of the traffic heading out of the coastal area is dependent upon many factors. As part of the 1992 TDR, interviews with coastal residents who evacuated indicated that most of them reached their destination in less than 30 minutes. If the evacuation notice is issued with plenty of advance time and daylight hours to travel, residents will reach a safe destination. However, if daylight hours for evacuation are limited, or the evacuation routes become clogged, there may be thousands of evacuees stranded along the highways. Therefore, planners must prepare for the possibility that local governments and commercial hotels many miles inland from the threatened area may have to provide short-term sheltering and other human services for coastal evacuees.
- J. Although there are clusters of hotels and motels along the evacuation routes, there are not enough rooms to accommodate all evacuees. During the summer, hotels and motels in non-coastal Virginia are about 75 percent full. Those vacationers are not likely to vacate their rooms because of threatening weather off the coast. Therefore, additional shelter spaces will be needed.
- K. Participating host localities will be identified and will be prepared to open public shelters for evacuees from the coastal area when requested to do so by the VEOC (see Annex D). Evacuees will be advised via the media during the evacuation of available shelter areas both public and private.

- L. It is not expected that shelter centers in host localities will be needed more than a day or two after the storm has passed. Evacuees will be returning to their homes; or if their homes are not habitable, will seek lodging near their homes. Public shelters in or near the area of devastation will remain open for longer-term care as needed.
- M. Hospitals, nursing homes, and group residential facilities operated by private or public agencies are required by license to have emergency plans. If they are located in the potential storm surge inundation area, they should have arranged to relocate to a like-facility in a safer area. Otherwise, they should be prepared with their own backup power source, a potable water supply, and backup communications to shelter in place and be self-sufficient for several days.
- N. Risk Area Public Shelters
 - 1. Risk localities will open public shelters as part of their preparation for the possible arrival of hurricane-force winds and storm surge flooding. Shelters will operate in accordance with the local EOP's.
 - 2. Risk localities will advise residents who live in storm surge inundation areas and those who live in mobile homes to seek shelter with friends or relatives, in motels and hotels, or in public shelters.
 - 3. Risk localities will notify the VEOC when shelters have been opened and report the status of shelter spaces and number of persons accommodated at least every four hours. Risk localities that cannot open shelters due to storm effects will notify the State EOC.
- O. Host Area Shelters
 - 1. The VEOC will keep the host localities informed of the evacuation and shelter situation in the risk areas.
 - 2. When the VEOC has been notified that risk localities are going to order an evacuation, the host localities will be alerted and advised to prepare to open public shelters.
 - 3. Local resources in host localities will direct traffic, as needed, from the evacuation routes to public shelters.
 - 4. Host localities will operate public shelters in accordance with their local EOP's.
 - 5. Risk and host localities will continue to report to the VEOC the status of public shelter spaces and evacuees accommodated every four hours.
 - 6. Host localities will continue to accept evacuees as long as they continue to arrive and available space exist.

P. Sequence of Events

The following events are listed generally and may occur in a differing sequence.

1. As the storm approaches, the VEOC and local EOCs will monitor advisories issued by the NWS/National Hurricane Center. They will review plans and procedures.
2. Localities will issue emergency declarations according to weather advisories and as indicated in their local EOPs.
3. Localities will issue emergency preparedness information to the public through the local news media (see Annex E).
4. The Governor will declare a State of Emergency and will issue an Executive Order authorizing localities to direct an evacuation of potential storm inundation areas.
5. The VEOC will notify host localities along the primary evacuation routes of the status of the hurricane and of the evacuation deliberations.
6. Spontaneous evacuation will begin to take place from potential storm surge inundation areas. Hospitals, nursing homes, and other special facilities will implement their emergency plans and procedures. Some will relocate and others will prepare to shelter in place and be self-sufficient for several days.
7. Each threatened locality will determine when to initiate an evacuation in concert with the VEOC and neighboring localities.
8. VDOT will be advised to be prepared to implement the Hampton Roads Hurricane Evacuation Traffic Control Plan.
9. Each threatened coastal locality will prepare to open public shelters.
10. Host localities along primary evacuation routes will be notified of the evacuation decisions and will be prepared to provide for traffic control and public shelter operations.
11. The VEOC will notify the North Carolina State EOC of the decision to evacuate Coastal Virginia. North Carolina will prepare, upon request, to implement the “Barco Diversion Plan” to divert traffic from northbound Routes 168 and 17 to avoid traffic congestion in Southside Hampton Roads.
12. Localities, in consultation with each other and with the VEOC, will issue evacuation directives. Initially a phased evacuation is most likely.

13. VDOT will implement the Hampton Roads Hurricane Evacuation Traffic Control Plan.
14. North Carolina will implement the “Barco Diversion Plan”.
15. Localities, both coastal and those along the primary evacuation routes, will prepare to operate “refuges of last resort”, as available.

Q. Evacuation Routes

1. Based on evacuation decisions made by localities, VDEM, VDOT and VSP will determine a specific time to implement the Hurricane Evacuation Traffic Control Plan. VDOT and VSP will restrict access to evacuation routes by placing equipment and personnel at entry points to control the number of vehicles entering at each access point. Local personnel will control traffic on routes leading to the designated evacuation routes.
2. The VEOC will notify VDOT/VSP of the specific time that the traffic restrictions will take effect.
3. The VEOC will notify all local EOCs in the risk area and in the host areas.
4. The VEOC will issue evacuation instructions to the public via all available media and VDOT roadside electronic Variable Message Signs, and Highway Advisory Radio (HAR).
5. The VEOC will use the media and VDOT roadside electronic Variable Message Signs and Highway Advisory Radio (HAR) to advise the public of host localities that will operate shelters for people evacuating from the coast.
6. Local officials will issue advisories and provide traffic control on local roads and streets that access the designated evacuation routes in accordance with local plans.
7. VDOT and the Virginia State Police will provide continuous information to the VEOC pertaining to the traffic flow, trouble spots, expected impact on inland traffic, and resource allocation.
8. VDOT will provide information on the location of shelters in host localities (if host shelters are being utilized) via radio and roadside electronic Variable Message Signs.
9. The VEOC JIC will keep the news media and all localities in the state informed and updated on evacuation and shelter information.
10. As the storm develops, VDOT and VSP, in coordination with local officials and the VEOC will determine when to stop the evacuation before driving becomes hazardous,

or prior to sustained tropical storm force winds are expected to affect the evacuation routes.

11. When evacuation routes are closed, local officials will assist motorists off of the evacuation routes and direct them to refuges of last resort.
12. All state and local traffic control officials should be off the roads by the arrival of sustained tropical storm force winds.

R. Stop Evacuation

1. With the arrival of sustained tropical storm force winds, it will no longer be safe for motorists or emergency workers to be outside, even in their own vehicles. Therefore, each coastal locality should issue a separate “stop evacuation” directive two to three hours in advance allowing time for the roads to be cleared.
2. Local law enforcement officials must then facilitate the movement of persons en route to abandon their plans to evacuate further inland and to seek the best available protection nearby. “Refuges of last resort” are recommended to be designated in advance. They are typically public or non-public buildings near evacuation routes, which can withstand heavy winds and will provide a safe haven for a few hours until the storm passes.
3. The local broadcast media will alert en route evacuees when they should seek “refuges of last resort”.
4. When a stop evacuation order is given, access to major evacuation routes may be closed. Any residents of potential storm inundation areas who have not yet evacuated must then seek “refuges of last resort” or refuge at other available elevated locations.
5. All state and local traffic control personnel and vehicles should also be off the roads by the arrival of tropical storm force winds.

ACTION CHECKLIST - EVACUATION

The following operations periods will be used in state and local hurricane plans. The need for coordination precludes the use of different time periods or terminology.

Condition 5: Routine Operations

1. Develop SOPs.
2. Conduct periodic exercises of evacuation plans with jurisdictions.
3. Conduct periodic computer-aided hurricane tracking and evacuation tools program training for local and state officials.
4. Localities identify “refuges of last resort” located along evacuation routes

Condition 4: Forecasted Arrival of Tropical Storm Force Winds Within 120 Hours (D-5 to D-3 Days)

1. Establish communications with NWS.
2. Plot and review HURREVAC projections from latest advisories from NHC.
3. Contact risk jurisdictions and alert them that shelter operations may be needed based upon approaching storm forecast conditions.
4. Request 72 hour staffing schedule from each state agency.
6. Continue/complete all Condition 5 activities.

Condition 3: Forecasted Arrival of Tropical Storm Force Winds Within 72 Hours (D-3 Days)

1. Secure and review advisories from NWS.
2. Plot and review HURREVAC projections from latest advisory from NHC.
3. Initiate conference calls with risk jurisdictions to discuss level of evacuation that may be needed.
4. Coordinate traffic issues and the traffic control plan with VDOT and VSP in anticipation of evacuation.

5. Contact host localities and determine which shelter facilities will be available, if needed.
6. Alert VDOT to stage Variable Message Signs along evacuation routes.
7. Governor considers level of evacuation authority for local risk jurisdictions.
8. Localities will begin issuing evacuation information through the local news media.

Condition 2: Forecasted Arrival of Tropical Storm Force Winds Within 48 Hours (D-2 Days)

1. Secure and review advisories from NWS.
2. Review HURREVAC and SLOSH projections from latest advisory from NHC.
3. Conduct conference calls with risk jurisdictions to discuss implementation of Phase One Evacuation per Hampton Roads Hurricane Evacuation Traffic Control Plan.
4. Jurisdictions advise EOC of evacuation decisions and timing.
5. Determine which host locality public shelter facilities to activate, if needed, and issue authorizations as required.
6. Contact VDOT for status of Hurricane Evacuation Traffic Control Plan implementation and traffic flows.
7. Contact VSP for status report on evacuation routes and timing for implementation of the BARCO Plan.
8. Advise VDOT to deploy Variable Message Signs along evacuation routes.
9. Update PIO of current evacuation status.
10. Continue/complete all Condition 3 activities.

Condition 1: Forecasted Arrival of Tropical Storm Force Winds Within 24 Hours (D-1 Day)

1. Secure and review advisories from NWS.
2. Review HURREVAC and SLOSH projections from latest advisory from NHC.
3. Evacuate coastal areas and residents in mobile homes and low-lying areas.

4. Get status reports from VDOT and VSP on traffic flows and road conditions.
5. Conduct conference calls with risk jurisdictions to discuss implementation of Phase Two and/or Lane Reversal (Contra Flow) Evacuation per Hampton Roads Hurricane Evacuation Traffic Control Plan.
6. Update PIO of current evacuation status.
7. Conduct conference calls with risk jurisdictions to discuss potential need to terminate evacuation per Hampton Roads Hurricane Evacuation Traffic Control Plan.
8. If evacuation is not completed within 2 to 3 hours of the arrival of tropical storm force winds motorists should be directed to Shelters or Refuges of Last Resort within each jurisdiction along the evacuation routes.
9. Continue/complete all Condition 2 activities.

Landfall: Arrival of Tropical Storm Force Winds - Departure of Tropical Storm Force Winds

1. Secure and review advisories from NWS.
2. Review HURREVAC projections from latest advisory from NHC.
3. If evacuation is not completed within 2 to 3 hours of the arrival of tropical storm force winds motorists should be directed to Shelters or Refuges of Last Resort within each jurisdiction along the evacuation routes.
4. Monitor shelter needs of public safety personnel along evacuation routes.
5. Conduct conference calls with risk jurisdictions following the departure of tropical storm force winds for status update.

Emergency Relief Phase: Life-Saving Operations and the Restoration of Essential Services

1. Continue to monitor evacuation conditions until reentry is initiated.
2. VDOT and local jurisdictions begin clearing debris from roads to facilitate reentry where safe conditions exist.
3. VSP coordinates with local law enforcement officials to control reentry.

Note: Although coastal localities and the VEOC will be using these hurricane-specific operations periods, others, to include host localities, will not. They may not have separate hurricane plans and will be using the standard operations periods. (Reference the State EOP.) However, the two checklists are not incompatible. If reference is made to the “hours before the arrival of tropical storm force winds,” local officials in inland localities can make it work within the context of their own checklists.

Attachment

1. Virginia - North Carolina Border Traffic Control Plan (Barco Plan)

Annex B, Attachment 1
Virginia - North Carolina Border Traffic Control Plan (Barco Plan)

SUMMARY

- A. The Virginia-North Carolina Border Traffic Control Plan is intended to provide a framework within which the two states and the affected localities can coordinate actions to deal with the evacuation of areas of both states threatened by hurricanes.
- B. Since hurricanes that form in the South Atlantic generally move in a northwest direction, the coastal areas of North Carolina will come under a Hurricane Watch or a Hurricane Warning (issued by the National Weather Service) earlier than the adjacent coastal areas of Virginia. Many of the motorists evacuating the communities on the Outer Banks (Dare and Currituck Counties in NC) travel north on Route 168 and enter Virginia within the limits of the city of Chesapeake. (Route 168 is the marked Hurricane Evacuation Route for the Outer Banks.) From that point, they go to their destination in the Hampton Roads area, or continue through the area on I-64 East or West.
- C. This plan outlines procedures for monitoring northbound and westbound traffic in Northeastern North Carolina and Southeastern Virginia, and procedures for initiating actions to adjust northbound evacuation traffic to minimize its effect on the westbound evacuation of Virginia's metropolitan Hampton Roads area. In order for all parties in both states to be aware of situations and actions, it is essential that communications between the VEOC and the North Carolina VEOC take place before any adjustment actions are implemented.

SITUATION

- A. The northeastern region of the State of North Carolina includes barrier islands (Outer Banks) and Currituck Sound areas (including Knotts Island) that are vulnerable to hurricanes. Even before the National Weather Services posts Hurricane Warnings, the National Park Service and local governments may initiate Hurricane Warnings for the Outer Banks evacuation. As many as 30,000 vehicles may evacuate from Dare and Currituck Counties. At least half of those vehicles are likely to use northbound Route 168, the Chesapeake Expressway or U. S. 171. The designated and marked evacuation route for the northern sections of the North Carolina coast (Dare and Currituck Counties) is northbound Route 168 which crosses the state line into Virginia within the limits of the City of Chesapeake.
- B. In Southeastern Virginia, the metropolitan area of Hampton Roads, including the cities of Virginia Beach, Chesapeake, Portsmouth, Norfolk, Suffolk, Hampton, Newport News, and Poquoson, is also vulnerable to the effects of hurricanes. The designated and marked evacuation routes for the southern portion of the Hampton Roads area include westbound Interstate 64, which is intersected by the evacuation route from North Carolina (Route 168),

Attachment 1 to Annex B: Virginia - North Carolina Border Traffic Control Plan (Barco Plan)

and westbound U. S. 58. As many as 80,000 vehicles may evacuate from the southern portion of the region.

- C. Spontaneous evacuation from coastal communities in the Hampton Roads area and North Carolina may occur without a posted Hurricane Warning.
- D. The northbound traffic from North Carolina will influence the capacity of the road network in Virginia to handle evacuating traffic from Virginia communities.

ASSUMPTIONS

- A. Communication can be established between the two states EOCs and local EOCs in Virginia and North Carolina.
- B. The VEOC will determine when to implement the VDOT Hampton Roads Hurricane Evacuation Traffic Control Plan to limit access onto evacuation routes.
- C. Virginia municipalities will direct evacuation within their boundaries allowing sufficient time for vehicles to clear the risk areas prior to the arrival of the hurricane.
- D. The City of Chesapeake will monitor the traffic flow on the designated evacuation routes within the city limits.

CONCEPT OF OPERATIONS

- A. The VEOC will monitor weather advisories from the National Weather Services as they affect the Outer Banks of North Carolina as well as Virginia.
- B. The City of Chesapeake, in coordination with the Virginia State Police will monitor traffic in the area around the Virginia - North Carolina Border.
- C. The VEOC will establish communications with the State of North Carolina EOC in Raleigh.
- D. The Virginia State Police and the City of Chesapeake will establish communications with state and local law enforcement officials in North Carolina and will request that northbound traffic be diverted west of the Chesapeake Expressway, Route 168 and U. S. 17 to allow maximum use of the Virginia evacuation routes for westbound traffic.
- E. The City of Chesapeake, in coordination with other cities at risk, will make the decision to direct an evacuation and will notify the VEOC.
- F. The VEOC will be notified when traffic diversion has been requested and implemented.

Attachment 1 to Annex B: Virginia - North Carolina Border Traffic Control Plan (Barco Plan)

- G. When directed by the VEOC, the VDOT, with assistance from the Virginia State Police and local law enforcement will implement the Hampton Roads Hurricane Evacuation Traffic Control Plan.
- H. When the Virginia State Police and the City of Chesapeake confirm that normal traffic has been re-established on the westbound routes, they will notify the VEOC.
- J. If the impact of the hurricane has resulted in damage or blockage of any roads in the southeastern portion of Virginia, that information will be relayed to the North Carolina State EOC from the VEOC.

ASSIGNMENT OF RESPONSIBILITIES

A. Virginia Department of Emergency Management – VEOC

1. Prior to 36 Hours Before Landfall

- a. Monitor weather advisories from the National Weather Service (National Hurricane Center).
- b. Establish communications with the North Carolina EOC when a Hurricane Watch is posted for the Outer Banks of North Carolina.
- c. Monitor state and local evacuation deliberations in North Carolina and in Virginia.

2. Between 36 Hours and Landfall

- a. Coordinate state resources to facilitate implementation of evacuation plans.
- b. Notify North Carolina EOC of evacuation plans.
- c. Notify the North Carolina EOC upon the decision to implement the regional evacuation plan.
- d. Verify through the Virginia State Police that the northbound traffic has been diverted.

3. After Landfall

As soon as possible, notify North Carolina EOC of conditions on the Virginia side of the northbound routes.

Attachment 1 to Annex B: Virginia - North Carolina Border Traffic Control Plan (Barco Plan)

B. Virginia State Police

1. Prior to 36 Hours Before Landfall:
 - a. Monitor traffic flow in the southeastern part of the state from the VEOC.
 - b. Receive traffic flow information from state or local law enforcement in Chesapeake.
 - c. Coordinate state law enforcement resources to facilitate implementation of evacuation plans.
 - d. Establish communication with North Carolina Highway Patrol.
2. Between 36 Hours and Landfall:
 - a. When notified that an evacuation has been directed, request North Carolina Highway Patrol to divert traffic south of the Virginia border west past the Chesapeake Expressway, Rt. 168 and U.S. 17 towards I-95 and coordinate with the City of Chesapeake to monitor the diversion.
 - b. Keep VEOC informed of traffic along the Virginia-North Carolina border and on the Virginia evacuation routes.
3. After Landfall
 - a. Assess damage to roadways and determine if closures are needed.
 - b. If roads are damaged or blocked, notify the VEOC.

C. Department of Transportation (Smart Traffic Center – VA Beach)

1. Prior to 36 Hours Before Landfall
 - a. Determine status of all evacuation routes, including those Virginia roads used by motorists evacuating from North Carolina (The Chesapeake Expressway, Route 168 and U. S. 17).
 - b. Make adjustments to the evacuation plan due to construction or temporary status, as needed.
 - c. Notify VEOC of any changes in the evacuation plan.
 - d. Coordinate resources to implement the plan.

2. From 36 Hours to Landfall

- a. To coincide with the evacuation directives issued by municipalities, implement the Hampton Roads Hurricane Evacuation Traffic Control Plan.
- b. Monitor the evacuation and notify the VEOC of status regularly.
- c. Communicate directly with North Carolina officials as needed. Notify VEOC.

3. After Landfall

As soon as possible, report the road conditions to the VEOC.

D. City of Chesapeake

1. Prior to 36 Hours Before Landfall

- a. Monitor weather advisories as they relate to northeast North Carolina as well as the city in accordance with local plans.
- b. Establish communications with VEOC, Virginia State Police, North Carolina Highway Patrol, and neighboring localities in both states.
- c. Implement monitoring system to determine traffic flow on the Chesapeake Expressway and Route 168 and to anticipate traffic problems in accordance with local plans.
- d. Manage traffic on Route 168 in accordance with local plans.

2. From 36 Hours to Landfall

- a. Monitor evacuation deliberations throughout the areas.
- b. When decision to evacuate has been made, contact the VSP to discuss implementation of traffic diversion procedures.
- c. After the VSP has requested the State of North Carolina to divert traffic away from Chesapeake, continue to monitor traffic and report status to the VEOC.

3. After Landfall

As soon as possible, notify the VEOC of conditions on all routes, including Route 168.

REFERENCES

1. The North Carolina Hurricane Evacuation Study (2003), Federal Emergency Management Agency and U. S. Army Corps of Engineers.
2. The Virginia Hurricane Evacuation Study (1992), Federal Emergency Management Agency and U. S. Army Corps of Engineers.